



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,627	07/16/2001	Ullas Gargi	10006286-1	2970

7590 11/16/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

WANG, JIN CHENG

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/904,627

Applicant(s)

GARGI ET AL.

Examiner

Jin-Cheng Wang

Art Unit

2672

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on 07 September 2004. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-20.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

Continuation of 5. does NOT place the application in condition for allowance because:

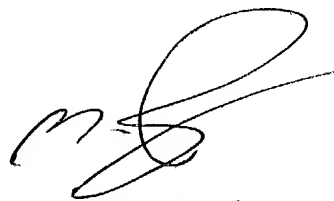
1) Applicant argues in essence that the Hirata patent is not directed to redisplaying a portion of displayed images using a refined distance metric. In response, Hirata teaches in column 7 that the step of image matching based on boundary is applied to the results of image matching based on region and the step of grouping and re-ordering based on similarity among result candidates is applied to the results of the image matching based on boundary. Moreover, in column 14 or in the claims 37-39, Hirata clearly teaches displaying the second set of images grouped by the clusters on the display and REDISPLAYING RE-ORDERED SECOND SET of IMAGES ON THE DISPLAY and therefore at least two steps of displaying is involved in the process.

2) Moreover, Hirata teaches in column 6 a similarity matching among the candidate images resulting from the region-based and boundary-based matching. Not only users can select regions for the image matching or querying, but also users can specify other parameters such as the threshold values to determine how the images are categorized into groups and this categorization is used to REDUCE the number of images to be displayed.

3) Hirata discloses in column 7 that the number of results (the number of the input images for the step (3) as taught in Hirata) to be processed in the step of image matching based on boundary and the step of grouping and re-ordering based on similarity among result candidate images can be CONTROLLED BY THE USER, and such a selection further limits the number of the candidate images to be re-displayed in step (3).

4) The displaying and re-displaying of the resulting candidate images are interactive because users can select the number of the candidate images to be processed and the threshold values for the clustering of the candidate images, thereby determining how the portion of candidate images (which is less than the candidate images from step (1) and (2) as taught in column 7 of Hirata) are arranged on the display. By selecting the number of the candidate images in the step of grouping and re-ordering based on similarity among the result candidates and the selection of the representative image in each cluster, the resulting images being redisplayed is less than the set of the resulting candidates from steps (1) and (2). Hirata thus teaches redisplaying a portion of displayed images selected in the previous step of the boundary image matching using a mutual similarity measure. Users' selection of the candidate images from the steps (1) and (2) produces a refined set of the candidate images for the step (3). Finally, it is noted that the mutual similarity as calculated in Hirata's column 9, lines 1-9 meets the claim limitation of a distance measure.

5) From the teaching of column 6-7 and 14, it is concluded that Hirata at least discloses two separate steps of displaying the candidate images wherein a lesser number of the clustered candidate images can be re-ordered and re-displayed. Hirata further teaches interactive user selection for selecting a subset of images to be re-ordered and re-displayed based on the mutual similarity.



MICHAEL RAZAVI  
SUPERVISOR, PATENT EXAMINER  
TECHNOLOGY CENTER 2000